

## **AMENDMENTS TO THE SPECIFICATION**

*Please amend the Description of the Invention Paragraph on page 3, beginning at line 6, of the substitute specification as follows:*

### **Description of the invention**

The main purpose of this invention is to provide a biopolymer, produced by an enzymatic extract or preparation having glucosyltransferase and fructosyltransferase activity. It is produced from a *Lactococcus lactis* strain (NRRL B-30656) characterised by its high transfer activity, allowing the biopolymer to be obtained by a simple production method which is easy to scale-up. The biopolymer, obtained from *Lactococcus lactis* strain (NRRL B-30656), metabolism products maintains a 0.2 to 0.7 glucose/fructose ratio. The biopolymer is characterized by presenting the following properties: 900-11,000 Kilodalton molecular weight; two glass transition points; the first between 20°C and 30°C and the second between 190°C and 220°C; stability in aqueous solutions, pH values ranging from 2 to 9; 1,000 to 3,000 centipoises viscosity when the polymer was at 10% to 20% concentration in an aqueous solution at 30°C; non-hygroscopic; and highly soluble in water, able to form hydrogel homogeneous dispersions at maximum 50% weight/volume concentration. Its production comprises the following steps: **Phase 1:** fermentation with the *Lactococcus lactis* NRRL B-30656 strain in a culture medium developed for this microorganism's growth; **Phase 2:** extracellular enzyme recovery trough centrifuging or ultra-filtration; **Phase 3:** biopolymer production trough enzyme reaction using sucrose as substrate and the enzymatic extract or preparation; and **Phase 4:** biopolymer purification trough precipitation with solvents or ultra-filtration followed by drying the product.